

Two language samples for maximizing linguistic variety

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This document is intended as a general presentation of two typological language samples I developed to investigate linguistic diversity. It also aims at illustrating the operational procedures behind their development and at discussing further possible improvements, tailored on one's specific research purposes.¹

First of all, both samples should be considered as *variety samples*: they are not statistically balanced, but rather aim at maximizing linguistic diversity by attempting to capture the broadest variation as possible. This means that the results of the studies based on these sample cannot be assumed to be fully relevant from a probabilistic point of view (versus *probability samples*), since they do not represent a balanced picture of the world's languages. Rather, they were created to gain the maximal variety of language types.

Before describing how the samples were compiled, it is worth mentioning the reasons that brought to their creation. The samples were created for the three-year project *UniversaLIST: List constructions in typological and cognitive perspective* funded by the LILEC Department at the University of Bologna (<http://www.lilec.it/list/universalist/>). The aim of the project is to investigate listing patterns from a typological perspective (for a definition of 'list' see Masini et al. 2018; cf. Masini & Mattiola 2019 and Mattiola & Masini 2019 for its typological application). Lists, as intended here, are a complex phenomenon that straddles the boundaries between levels of analysis, from morphology to syntax to discourse. In addition, the fact that lists are typically found in spontaneous speech makes data gathering particularly hard at a cross-linguistic level, since descriptive grammars are more focused on established 'grammatical' phenomena. For these reasons, the project required a maximally varied sample. As we know, typological investigations are often (but not always) based on WALS samples (i.e., the 100-/200-samples and/or samples of specific chapters, cf. for example my own work on pluractional markers: Mattiola 2019: 15–17). However, recurrent use of the same set(s) of languages, albeit broad, might develop into a sort of *WALS bias* which can lead to a (highly probable) skewed data interpretation towards some specific language

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types (see Dahl 2015). This might eventually influence the reliability of typological generalizations. As a consequence, whenever possible, I opted for choosing languages that are not included within the WALS samples.

The two samples consist of 424 and 223 languages. The original sample is the 424-language sample, the 223-one being (basically)² a sub-set of the first. The creation of a second, smaller version is due to pragmatic reasons: since data gathering for typological projects can be a time-consuming and discontinuous activity, it is handier to organize the work flow in a progressive way, with intermediate steps endowed with their own internal cohesion.

These two samples are based on the diversity value technique (DV) proposed by Rijkhoff et al. (1993) and Rijkhoff & Bakker (1998). In short, this technique considers genealogical classification as a basic criterion for selecting languages. More specifically, the internal structure of language families is thought to be expression of their internal variation and, consequently, of linguistic diversity: the more internal ramifications³ a family or branch shows, the more variation we can find inside that family or branch. In other words, the assumption behind this technique is that even a single ramification within a single family mirrors some variation in the structural organization of the languages that belong to the ramification(s) in question; also, the number of sub-ramifications of a specific higher-level node is relevant, since it reveals a broader degree of diversity, i.e. a higher *diversity value*. Conversely, the number of terminal nodes (i.e. single languages) is less relevant (for a more detailed description of this technique see Bakker 2011 and Miestamo et al. 2016).

Miestamo et al. (2016) tested the reliability (or performance) of different sampling techniques, focusing specifically on *variety sampling* techniques, namely DV and Genus-Macroarea (cf. Miestamo 2003, 2005 and Miestamo et al. 2016). What emerges is that, in samples that count less than 500 languages, the DV technique performs better than others. In addition, a DV sample performs even better if it follows the genealogical classification proposed by Ethnologue (they tested both Ethnologue and Glottolog classifications). For these reasons, I decided to build my samples following the DV technique and Ethnologue's genealogical classification.

Miestamo et al. (2016) published as an appendix to their paper some very useful tables in which they illustrate how many languages one needs to choose from each language family in case one adopts the DV technique and Ethnologue's classification (Table A-1) or Glottolog's classification (Table A-2), once the size of the sample is defined. I therefore followed the column of Table A-1 (DV and

² I compiled the 223-language sample starting from the 424-language sample, but, since the former was created almost a year later than the latter, I also made some adjustments and changes following the criteria listed below.

³ Internal ramification is here intended as the "complexity of the tree under [the node], recursively calculated in terms of the number of levels and the number of sister nodes on each lower level" (Miestamo et al. 2016: 244).

Ethnologue) in which the authors indicate how many languages we need to select if we want to create a 350-language sample (my initial size choice). The final sample counts 424 languages because I also decided to add every isolate language, as well as pidgins/creoles and sign languages for which a grammatical description is available. While Miestamo and colleagues suggest to select just 1 isolate and 1 unclassified language, I decided to add more languages of this sort because, in principle, isolate languages can be compared to a language family in terms of variation, since they de facto represent a whole language family composed of a single node (though a terminal one). I also included pidgins/creoles and sign languages because they are usually left behind in typological studies. All these additions therefore aim, once again, at maximizing linguistic variety.

In addition, Table A-1 in Miestamo et al. (2016) specifies just the number of languages for each high-level language family. In this case, I obviously opted to select a language for each sub-ramification. However, I was faced with some problematic situations caused by the difference between the version of Ethnologue used by Miestamo et al. (2016) (Ethnologue 2015, henceforth E15) and the one I used (Ethnologue 2018, henceforth E18) (the two versions disagree in the classification of some language families). One such situation regarded a language family in E18, which had less ramifications than the number of languages to be selected from it according to Table A-1. In this case, I opted for choosing the same number of languages Miestamo et al. suggest to select.⁴ In order to pick the additional languages, I decided to take into consideration the higher ramifications with more sub-ramifications, since, according to the DV technique, they are expression of more internal variations. A second situation regarded (opposite) cases where the number of languages to be selected was lower than the number of internal ramifications of a specific language family. In this case, I decided to add one language for each ramification following the basic assumption of the DV technique, thus, again, extending the overall number of languages. The third problematic situation I faced regarded cases where a language family was present in E15 and Table A-1 but did not exist anymore in E18. To solve these cases, I tried to understand why the family was no longer present in E18. If this was due to the fact that the family was split in several sub-branches, then I decided to select a language for each ‘new’ ramification, again following the spirit of the DV technique. If, instead, this was due to the fact that original family was included in another language family, then I opted to take into consideration each internal ramification of the ‘new’ language family.

From a practical point of view, I followed some additional criteria to select the languages for my samples. First, I gave more importance to the quality/nature of the available grammatical descriptions, thus opting for the language that was described by the best grammar within each ramification of a language family. Needless to say, the ‘ideal’ grammar does not exist, since grammarians cannot

⁴ Given that my samples are variety samples and not probability samples, adding languages is not problematic at all.

answer to all the questions typologists might have in mind. Thus, with ‘best grammar’ I mean the grammar in which it was more likely to find data for my research on lists. In order to select the ‘best grammar’ I followed three main criteria, namely I opted for:

- i. the most **recent** grammatical description: since lists are not a traditional grammatical category, it is more likely to find data on them in grammars that are updated with current linguistic theory. In addition, this criterion also allowed to select languages that are different from the ones used in WALS chapters (published in 2005);
- ii. the most **exhaustive** grammatical description: the more detailed a grammar is, the more probable it is to find data on lists in it. This roughly means ‘grammars with a higher number of pages’. However, a high number of pages does not necessarily mean ‘more exhaustive’, thus I decided case by case;
- iii. the **easiest** grammatical description to get: this is a practical criterion, according to which I opted for a grammar instead of another (even if this was ‘better’ than the selected one in terms of recentness and exhaustivity) when I had the possibility of having at my disposal the latter but not the former. Luckily, I had to resort to this criterion quite seldomly.

In order to apply these criteria in practice, I looked for the ‘best’ grammatical description available for each language ramification for which I had to select a language. To do so, I used the bibliographic database of Glottolog. Of course, since I followed the genealogical classification by E18, I had to adjust my search in Glottolog by looking for the ISO-639-3 code of the languages, not considering the classification of Glottolog itself.

The result of this work is the 424-language sample. As already mentioned, the 223-language sample is an ‘abridged’ version of the first one. To create this second version, I excluded several isolate languages, pidgins/creoles, and sign languages, but not all of them. I also compared the 424-language sample with Table A-1’s column for a 200-language sample.

The two samples, with the suggested bibliographic references, are detailed below in Table 1 and Table 2 respectively.

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Table 1 – Variety sample composed of 424 languages.¹

Macro-Area	Family	Genus	Sub-classification	Language	ISO-639-3	References suggested
Africa	Afro-Asiatic	Berber	Tamasheq > Southern	Tamasheq	taq	Heath (2005)
Africa	Afro-Asiatic	Chadic	Biu-Mandara > A > A.4 > Mandara Proper > Mandara	Wandala	mfi	Frajzyngier (2012)
Africa	Afro-Asiatic	Chadic	Biu-Mandara > A > A.7	Buwal	bhs	Viljoen (2013)
Africa	Afro-Asiatic	Chadic	Biu-Mandara > B > B.1 > Kotoko Proper > North	Mpade	mpi	Allison (2012)
Africa	Afro-Asiatic	Chadic	East > A > A.2 > 1	Lele	lln	Frajzyngier (2001)
Africa	Afro-Asiatic	Chadic	Masa	Masana	mcn	Melis (1999)
Africa	Afro-Asiatic	Chadic	West > A > A.1	Hausa	hau	Newman (2000), Jaggar (2001)
Africa	Afro-Asiatic	Chadic	West > A > A.3 > Angas Proper > 2	Goemai	ank	Hellwig (2011)
Africa	Afro-Asiatic	Chadic	West > B > B.2	Miya	mkf	Schuh (1998)
Africa	Afro-Asiatic	Cushitic	East > Western Omo-Tana	Daasanach	dsh	Tosco (2001)
Africa	Afro-Asiatic	Cushitic	South	Iraqw	irk	Mous (1992)
Africa	Afro-Asiatic	Omoti	South	Hamer-Banna	amf	Petrollino (2016)
Africa	Afro-Asiatic	Semitic	Central > South > Arabic	Maltese	mlt	Borg & Azzopardi-Alexander (1997)
Africa	Afro-Asiatic	Semitic	East	Akkadian	akk	Huehnergard (2011)
Africa	Afro-Asiatic	Semitic	South > Ethiopian > South > Transversal > Amharic-Argobba	Amharic	amh	Leslau (1995)
Africa	Creole	Arabic	//	Arabic Sudanese Creole	pga	Manfredi (2017)
Africa	Creole	English	//	Equatorial Guinean Pidgin	fpe	Yakpo (2009)
Africa	Creole	Ngbandi	//	Sango	sag	Diki-Kidiri (1977), Diki-Kidiri (1978)
Africa	Creole	Portuguese	//	Kabuverdianu	kea	Quint (1998)
Africa	Isolate	//	//	Bangime	dba	Heath & Hantgan (2017)
Africa	Isolate	//	//	Laal	gdm	Boyeldieu (1982)
Africa	Isolate	//	//	Sandawe	sad	Steeman (2012)
Africa	Khoe-Kwadi (Khoisan)	Khoe	Kalahari Khoe > Northwest	Khwedam	xuu	Kilian-Hatz (2008)

¹ For what concerns pidgins and creoles, I indicate in the column Family if it is a creole or a pidgin (according to Glottolog) and only the lexifier language in the column Genus.

Africa	Kx'a	!Kung	//	Kung-Ekoka	knw	Heine & Christa (2016)
Africa	Niger-Congo	Atlantic-Congo	Atlantic > Bijago	Bidyogo	bjg	Segerer (2002)
Africa	Niger-Congo	Atlantic-Congo	Atlantic > Northern > Bak > Manjaku-Papel	Papel	pbo	Ndao (2011)
Africa	Niger-Congo	Atlantic-Congo	Atlantic > Southern > Mel > Bullom Kissi > Bullom > Northern	Bullom So	buy	Childs (2011)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Northern > Mambiloid > Suga-Vute > Vute	Wawa	www	Martin (2012)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > Beboïd	Noone	nhu	Hyman (1981)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > Narrow Bantu > Central > D > Lega-Holoholo (D.201)	Lika	lik	de Wit (2015)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > Narrow Bantu > Central > F > Nilamba-Rangi (F.33)	Langi	lag	Dunham (2005), Dunham (2001)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > Narrow Bantu > Central > G > Swahili (G.402)	Makwe	ymk	Devos (2007)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > Narrow Bantu > Central > H > Kikongo (H.16)	Koongo	kng	Ndonga (1995)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > Narrow Bantu > Central > J > Ruanda-Rundi (D.66)	Ha	haq	Harjula (2004)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > Narrow Bantu > Central > K > Subiya-Totela (K.402)	Fwe	fwe	Gunnink (2018)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > Narrow Bantu > Central > L > Lunda (L.52)	Lunda	lun	Kawasha (2003)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > Narrow Bantu > Central > P > Makhuwa (P.34)	Chuwabu	chw	Guérois (2015)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > Narrow Bantu > Central > R > Yeyi (R.41)	Yeyi	yey	Seidel (2008)

Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > Narrow Bantu > Central > S > Sotho-Tswana (S.311)	Kgalagadi	xkv	Lukusa & Monaka (2008)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > Narrow Bantu > Northwest > A > Ewondo-Fang (A.71)	Eton	eto	van de Velde (2008)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > Narrow Bantu > Northwest > B > Tienne-Yanzi (B.865)	Nzadi	nzd	Crane at al. (2011)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > Narrow Bantu > Northwest > C > Tetela (C.71)	Tetela	tll	Kamomba (1997), Labaere (1982/1995)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > West Grassfieldss > Narrow Grassfields > Mbam-Nkam > Ngemba	Ngemba	nge	Leroy (2007)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > Yemne-Kimbi	Mundabli	boe	Voll (2017)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > Yemne-Kimbi	Mungbam	mij	Lovegren (2013)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Cross River > Bendi	Bekwarra	bkv	Stanford (1967)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Cross River > Delta Cross > Lower Cross > Obolo	Obolo	ann	Rowland Oke (2003)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Defoid > Edekiri	Yoruba	yor	Bamgboṣe (1966)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Edoid > North-Central > Edo-Esan-Ora	Emai-Iuleha-Ora	ema	Schaefer & Egbokhare (2017)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Jukunoid > Central > Jukun-Mbembe-Wurbo > Mbembe	Mbembe Tigon	nza	Richter (2012)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Kainji > Western > Kamuku	Cicipu	awc	McGill (2009)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Nupoid > Nupe-Gbagyi > Gbagyi-Gbari	Gbari	gby	Rosendall (1998)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Plateau > Southern	Lijili	mgi	Stofberg (1978)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Dogon	Jamsay Dogon	djm	Heath (2008)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Kru > Eastern > Bete > Western	Godié	god	Godé (2008)

Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Kwa > Left Bank > Kposo-Ahlo-Bowili	Ikposo	kpo	Soubrier (2013)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Kwa > Nyo > Attie	Attie	ati	Kouadio N'Guessan (1996)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > North > Adamawa-Ubangi > Adamawa > Mbum-Day > Mbum > Northern > Tupuri-Mambai	Samba Leko	ndi	Fabre (2003)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > North > Adamawa-Ubangi > Ubangi > Banda > Central > Central Core > Mid-Southern	Mono	mnh	Kamanda-Kola (2003)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > North > Adamawa-Ubangi > Ubangi > Banda > Central > Central Core > Mid-Southern	Northern Ngbandi	ngb	Toronzoni (1989)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > North > Adamawa-Ubangi > Ubangi > Ngbandi	Mundang	mua	Elders (2000)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > North > Gur > Central > Northern > Kurumfe	Koromfè	kfz	Rennison (1997)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > North > Gur > Central > Southern > Grusi > Western	Chakali	cli	Brindle (2017)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > North > Gur > Kulango	Bouna Kulango	nku	Elders (2008)
Africa	Niger-Congo	Kordofanian	Talodi > Talodi Proper > Tocho	Lumun	lmd	Smits (2017)
Africa	Niger-Congo	Mande	Eastern > Southeastern > Guro-Tura > Tura-Dan-Mano > Mano	Maan	mev	Khachaturyan (2014)
Africa	Niger-Congo	Mande	Western > Northwestern > Samogo	Dzùùngoo	dnn	Solomiac (2007)
Africa	Nilo-Saharan	Kuliak	//	Ik	ikx	Schrock (2014)
Africa	Nilo-Saharan	Saharan	Eastern	Zaghawa	zag	Jakobi et al. (2004)
Africa	Nilo-Saharan	Satellite-Core	Core > B'aga	Gumuz	guk	Ahland (2012)
Africa	Nilo-Saharan	Satellite-Core	Core > Eastern Sudanic > Southern > Eastern Jebel > Gaam	Gaam	tbi	Stirtz (2012)
Africa	Nilo-Saharan	Satellite-Core	Core > Eastern Sudanic > Southern > Nilotic > Eastern > Lotuxo-Teso > Teso-Turkana > Teso	Teso	teo	Barasa (2017)
Africa	Nilo-Saharan	Satellite-Core	Core > Eastern Sudanic > Southern > Nilotic > Western > Luo > Southern > Luo-Acholi > Alur-Acholi > Lango-Acholi	Lango	laj	Noonan (1992)

Africa	Nilo-Saharan	Satellite-Core	Core > Kadugli-Krongo	Krongo	kgo	Reh (1985)
Africa	Nilo-Saharan	Satellite-Core	Core > Koman	Uduk	udu	Killian (2015)
Africa	Nilo-Saharan	Satellite-Core	Satellite > Central Sudanic > East > Lendu	Ngiti	niy	Kutsch Lojenga (1994)
Africa	Nilo-Saharan	Satellite-Core	Satellite > Central Sudanic > East > Moru-Madi > Southern	Ma'di	mhi	Blackings & Fabb (2003)
Africa	Nilo-Saharan	Satellite-Core	Satellite > Central Sudanic > West > Bongo-Bagirmi > Sara-Bagirmi > Sara > Sara Proper	Kabba	ksp	Moser (2004)
Africa	Nilo-Saharan	Satellite-Core	Satellite > Maban > Maba	Maba	mbe	Weiss (2009)
Africa	Nilo-Saharan	Songhay	Southern	Koyra Chiini Songhay	khq	Heath (1999)
Africa	Sign language	//	//	Adamorobe Sign Language	ads	Nyst (2007)
Africa	Sign language	//	//	Ugandan Sign Language	ugn	Lutalo Kiingi (2014)
Africa	Tuu	!Ui	//	N u	ngh	Collins & Namaseb (2011)
Africa	Unclassified	//	//	Kara	kah	Boyeldieu (1987)
Africa	Unclassified	//	//	Shabo	sbf	Kibebe (2015)
Australia & New Guinea	Australian	Bunaban	//	Gooniyandi	gni	McGregor (1990)
Australia & New Guinea	Australian	Daly	Bringen-Wagaydy > Wagaydy	Ami	amy	Ford (1998)
Australia & New Guinea	Australian	Djamindjungan	//	Djamindjung	djd	Schultze-Berndt (2000), Cleverly (1968)
Australia & New Guinea	Australian	Djeragan	//	Miriwung	mep	Kofod (1978)
Australia & New Guinea	Australian	Giimbiyu	//	Erre / Mangerr / Urningangg	err / zme / urc	Campbell (2006)
Australia & New Guinea	Australian	Gunwingguan	Yangmanic	Wardaman	wrr	Merlan (1994)
Australia & New Guinea	Australian	Laragiyan	//	Laragia	lrg	Capell (1984)
Australia & New Guinea	Australian	Limilngan-Wulna	//	Limilngan	lmc	Harvey (2001)
Australia & New Guinea	Australian	Nyulnyulan	//	Bardi	bcj	Bowern (2012)

Australia & New Guinea	Australian	Pama-Nyungan	Maric	Warungu	wrg	Tsunoda (2011)
Australia & New Guinea	Australian	Tangic	//	Kayardild	gyd	Evans (1995)
Australia & New Guinea	Australian	Tiwian	//	Tiwi	tiw	Lee (1987), Osborne (1974)
Australia & New Guinea	Australian	Umbugarla-Ngumbur	//	Umbugarla	umr	Davies (1989)
Australia & New Guinea	Australian	West Barkly	//	Wambaya	wmb	Nordlinger (1998), Nordlinger (1993)
Australia & New Guinea	Australian	Worrorran	Western Worrorran	Worrorra	wro	Clendon (2014)
Australia & New Guinea	Australian	Yanyi	//	Garrwa	wrk	Mushin (2012)
Australia & New Guinea	Australian	Yiwaidjan	Yiwaidjic	Maung	mph	Capell & Hinch (1970)
Australia & New Guinea	Border	Waris	//	Imonda	imn	Seiler (1985)
Australia & New Guinea	Central Solomons	//	//	Lavukaleve	lvk	Terrill (2003)
Australia & New Guinea	East Bird's Head-Sentani	East Bird's Head	Meax	Moskona	mtj	Gravelle (2010)
Australia & New Guinea	East New Britain	Baining	//	Mali	gcc	Stebbins (2011)
Australia & New Guinea	Fas	//	//	Fas	fqs	Honeyman (2017)
Australia & New Guinea	Harákmbut	//	//	Amarakaeri	amr	Helberg Chávez (1984)
Australia & New Guinea	Isolate	//	//	Kuot	kto	Lindström (2002)
Australia & New Guinea	Kwomtari	Nuclear Kwomtari	//	Kwomtari	kwo	Honsberger et al. (2008)
Australia & New Guinea	Lower Mamberamo	//	//	Warembori	wsa	Donohue (1999)
Australia & New Guinea	Mongol-Langam	//	//	Yaul	yla	Barlow (2018)
Australia & New Guinea	Nimboran	//	//	Nimboran	nir	May (1997), Anceaux (1965)

Australia & New Guinea	North Bougainville	Rotokas	//	Rotokas	roo	Robinson (2011)
Australia & New Guinea	Pidgin	Motu	//	Motu, Hiri	hmo	Dutton & Voorhoeve (1975)
Australia & New Guinea	Ramu-Lower Sepik	Lower Sepik	Karawari	Yimas	yee	Foley (1991)
Australia & New Guinea	Ramu-Lower Sepik	Ramu	Ottilien > Bosmun-Awar	Awar	aya	Levy (2002)
Australia & New Guinea	Sepik	Abau	//	Abau	aau	Lock (2011)
Australia & New Guinea	Sepik	Ram	//	Awtuw	kmn	Feldman (1986)
Australia & New Guinea	Sepik	Tama	//	Mehek	nux	Hatfield (2016)
Australia & New Guinea	Skou	Skou-Serra-Piore	Serra Hills > Piore River	Warupu	wra	Corris (2005)
Australia & New Guinea	South Bougainville	Buin	//	Siwai	siw	Onishi (1994)
Australia & New Guinea	South-Central Papuan	Morehead-Upper Maro	Tonda	Wára	tei	Döhler (2018)
Australia & New Guinea	Torricelli	Combio-Arapesh	Arapesh	Bukiyip	ape	Conrad & Wogiga (1991)
Australia & New Guinea	Torricelli	Wapei-Palei	Wapei	Yapunda	yev	Wilson (2017)
Australia & New Guinea	Trans-New Guinea	Amsat-Kamoro	Asmat	Asmat, Central	asn	Voorhoeve (1965)
Australia & New Guinea	Trans-New Guinea	Angan	Nuclear Angan	Menya	mcr	Whitehead (2004)
Australia & New Guinea	Trans-New Guinea	Chimbu-Wahgi	Chimbu	Dom	doa	Tida (2006)
Australia & New Guinea	Trans-New Guinea	Duna-Bogaya	//	Duna	duc	San Roque (2008)
Australia & New Guinea	Trans-New Guinea	East Strickland	//	Konai	kxw	Årsjö (2016)
Australia & New Guinea	Trans-New Guinea	Eleman	Tate	Kaki Ae	tbd	Clifton (1997)
Australia & New Guinea	Trans-New Guinea	Engan	Angal-Kewa	Kwewa, East	kjs	Yarapea (2006)

Australia & New Guinea	Trans-New Guinea	Finisterre-Huon	Finisterre > Uruwa	Yau	yuw	Sarvasy (2017), Sarvasy (2014)
Australia & New Guinea	Trans-New Guinea	Greater Binanderean	Binanderean > Nuclear Binanderean > South Binanderean > Coastal Binanderean > Gaena-Korafe	Korafe-Yegha	kpr	Farr (1999)
Australia & New Guinea	Trans-New Guinea	Kainantu-Goroka	Gorokan > Kamano-Yagaria	Yagaria	ygr	Haiman (1980)
Australia & New Guinea	Trans-New Guinea	Kiwaian	//	Kiwai, Northeast	kiw	Brown et al. (2016)
Australia & New Guinea	Trans-New Guinea	Madang	Croisilles > Pihom > Kumilan	Mauwake	mhl	Berghäll (2015)
Australia & New Guinea	Trans-New Guinea	Marind	Nuclear Marind	Marind	mrz	Olsson (2017)
Australia & New Guinea	Trans-New Guinea	Mek	Eastern	Lik	eip	Heeschen (1998)
Australia & New Guinea	Trans-New Guinea	Ok-Awyu	Ok > Mountain	Mian	mpt	Fedden (2011)
Australia & New Guinea	Trans-New Guinea	Oksapmin	//	Oksapmin	opm	Loughnane (2009)
Australia & New Guinea	Trans-New Guinea	South Bird's Head	Inanwatan	Suabo	szp	de Vries (2004)
Australia & New Guinea	Trans-New Guinea	Southeast Papuan	Dagan	Daga	dgz	Murane (1974)
Australia & New Guinea	Trans-New Guinea	Teberan	//	Dadibi	mps	MacDonald (1976)
Australia & New Guinea	Trans-New Guinea	West	Timor-Alor-Pantar > Timor	Makasae	mkz	Huber (2011)
Australia & New Guinea	Trans-New Guinea	West Kutubu	//	Fasu	faa	Loeweke & May (1980)
Australia & New Guinea	Trans-New Guinea	Wiru	//	Wiru	wiu	Kerr (1967)
Australia & New Guinea	West Papuan	North Halmahera	Ternate-Tidore	Tidore	tvo	van Staden (2000)
Australia & New Guinea	West Papuan	West Bird's Head	//	Tehit	kps	Flassy (1991)
Australia & New Guinea	Yele-West New Britain	Yele	//	Yele	yle	Henderson (1995)

Eurasia	Andamanese	Great Andamanese	Northern	Aka-Jeru	akj	Abbi (2013)
Eurasia	Chukotko-Kamchatkan	Northern	Chukot	Chukchi	ckt	Dunn (1999)
Eurasia	Creole	Assamese	//	Naga Pidgin	nag	Bhattacharjya (2001)
Eurasia	Creole	Malay	//	Sri Lankan Creole Malay	sci	Nordhoff (2009)
Eurasia	Dravidian	Northern	//	Kurux	kru	Kobayashi & Tirkey (2017)
Eurasia	Dravidian	Southern	Tamil-Kannada > Tamil-Kodagu > Tamil-Malayalam > Malayalam	Malayalam	mal	Asher & Kumari (1997)
Eurasia	Dravidian	Southern	Tamil-Kannada > Tamil-Kodagu > Tamil-Malayalam > Tamil	Betta Kurumba	xub	Coelho (2003)
Eurasia	Indo-European	Armenian	//	Armenian	hye	Dum-Tragut (2009)
Eurasia	Indo-European	Balto-Slavic	Baltic > Eastern	Lithuanian	lit	Vytautas et al. (2006)
Eurasia	Indo-European	Celtic	Insular > Brythonic	Breton	bre	Crahe (2013)
Eurasia	Indo-European	Germanic	West > Frisian	Frisian, Northern	frf	Lasswell (1998)
Eurasia	Indo-European	Greek	Attic	Greek	ell	Holton et al. (2012)
Eurasia	Indo-European	Indo-Iranian	Indo-Aryan > Intermediate Divisions > Eastern > Eastern Pahari	Nepal	npi	Acharya (1990)
Eurasia	Indo-European	Indo-Iranian	Indo-Aryan > Intermediate Divisions > Western > Panjabi	Panjabi, Eastern	pan	Bhatia (1993)
Eurasia	Indo-European	Indo-Iranian	Indo-Aryan > Intermediate Divisions > Western > Romani > Vlax	Romani, Vlax	rmy	Wagner (2012)
Eurasia	Indo-European	Indo-Iranian	Indo-Aryan > Outer Languages > Eastern > Bengali-Assamese	Bengali	ben	Thompson (2012)
Eurasia	Indo-European	Indo-Iranian	Indo-Aryan > Outer Languages > Northwestern > Dardic > Shina	Palula	ppl	Liljegren (2016)
Eurasia	Indo-European	Indo-Iranian	Indo-Aryan > Outer Languages > Southern	Marathi	mar	Pandharipande (1997), Dhongde & Wali (2009)
Eurasia	Indo-European	Indo-Iranian	Indo-Aryan > Western Hindi > Hindustani	Hindi	hin	Kachru (2006)
Eurasia	Indo-European	Indo-Iranian	Iranian > Eastern > Southeastern > Pashto	Pashto	pst/pbu/pbt	David (2014)
Eurasia	Indo-European	Indo-Iranian	Iranian > Western > Northwestern > Talysh	Talysh	tly	Paul (2011)
Eurasia	Indo-European	Indo-Iranian	Iranian > Western > Southwestern > Persian	Persian	pes	Mahootian (1997)

Eurasia	Indo-European	Indo-Iranian	Unclassified	Pali	pli	Oberlies (2001)
Eurasia	Indo-European	Italic	Romance > Italo-Western > Western > Gallo-Iberian > Ibero-romance > East Iberian	Catalan	cat	Hualde (1992)
Eurasia	Isolate	//	//	Ainu	ain	Bugaeva (2004)
Eurasia	Isolate	//	//	Basque	eus	Hualde & Ortiz de Urbana (2003)
Eurasia	Isolate	//	//	Burushaski	bsk	Yoshioka (2012)
Eurasia	Isolate	//	//	Gilyak	niv	Nedjalkov & Otaina (2013)
Eurasia	Isolate	//	//	Kusunda	kgg	Watters (2006)
Eurasia	Isolate	//	//	Nihali	nll	Nagaraja (2014)
Eurasia	Japonic	//	//	Japanese	jpn	Kaiser et al. (2013), Martin (1988)
Eurasia	Kartvelian	Zan	//	Laz	lzz	Lacroix (2009)
Eurasia	Koreanic	//	//	Korean	kor	Sohn (1994), Martin (1992)
Eurasia	Mongolic	Eastern	Mongour	Bonan	peh	Fried (2010)
Eurasia	North Caucasian	East Caucasian	Nakh	Ingush	inh	Nichols (2011)
Eurasia	North Caucasian	East Caucasian	Tsezic > West Tsezic	Hinukh	gin	Forker (2013)
Eurasia	North Caucasian	West Caucasian	Ubyx	Ubykh	uby	Fenwick (2011)
Eurasia	Sign language	//	//	Indian Sign Language	ins	Zeshan (2000)
Eurasia	Sign language	//	//	Italian Sign Language	ise	Volterra (1987)
Eurasia	Sign language	//	//	Jordanian Sign Language	jos	Hendriks (2008)
Eurasia	Tungusic	Southern	Udihe	Udihe	ude	Nikolaeva & Tolskaya (2001)
Eurasia	Turkic	Eastern	//	Uyghur	uig	Abdurehim (2014)
Eurasia	Uralic	//	//	Khanty	kca	Filchenko (2007)
Eurasia	Uralic	Sami	Western > Northern	Saami, Pite	sje	Wilbur (2014)
Eurasia	Uralic	Samoyed	Northern Samoyed	Nenets	yrk	Nikolaeva (2014)
Eurasia	Yeniseian	//	//	Ket	ket	Georg (2007)
Eurasia	Yukaghir	//	//	Southern Yukaghir	yux	Maslova (2003)

North America	Algic	Algonquian	Arapaho	Arapaho	arp	Cowell & Moss (2008)
North America	Algic	Ritwan	//	Yurok	yur	Garrett (2014)
North America	Caddoan	Caddoan	Northern Caddoan > Kitsai-Proto-Pawnee > Proto-Pawnee	Pawnee	paw	Parks (1976)
North America	Chimakuan	Chimakuan	//	Quileute	qui	Andrade (1933-1938)
North America	Chinookan	Upper Chinookan	//	Wasco-Wishran	wac	Hymes (1955)
North America	Chumash	Chumashan	Central Chumash	Ineseño	inz	Applegate (1972)
North America	Cochimí-Yuman	Yuman	Pai	Havasupai-Walapai-Yavapai	yuf	Watahomigie et al. (1982)
North America	Coosan	//	//	Coos	csz	Frachtenberg (1922)
North America	Creole	French	//	Lousiana Creole	lou	Klingler (1992)
North America	Eskimo-Aleut	Eskimo	Yupik > Alaskan Yupik	Yupik, Central	esu	Miyaoka (2012)
North America	Eyak-Athabaskan	Athabaskan	Apachean	Navajo	nav	Young & Morgan (1987)
North America	Eyak-Athabaskan	Athabaskan	Northern Athabaskan	Chilcotin	clc	Cook (2013)
North America	Eyak-Athabaskan	Athabaskan	Pacific Coast Athabaskan > California Athabaskan	Hupa	hup	Golla (1970), Golla (1996)
North America	Haida	//	//	Haida, Northern/Southern	hdn / hax	Enrico (2003)
North America	Huavean	//	//	Huave, San Dioniso del Mar	hve	Salminen (2017)
North America	Iroquoian	Northern Iroquoian	Five Nations-Huronian-Susquehannock > Five Nations-Susquehannock	Onondaga	ono	Woodbury (2018)
North America	Isolate	//	//	Chimariko	cid	Jany (2009), Jany (2007)
North America	Isolate	//	//	Chitimacha	ctm	Granberry (2004)
North America	Isolate	//	//	Karok	kyh	Bright (1957)
North America	Isolate	//	//	Klamath-Modoc	kla	Barker (1964)

North America	Isolate	//	//	Kutenai	kut	Morgan (1992)
North America	Isolate	//	//	Molale	mbe	Pharris (2006)
North America	Isolate	//	//	Salinan	sln	Turner (1987)
North America	Isolate	//	//	Seri	sei	Moser & Marlett (1996), Marlett (1981)
North America	Isolate	//	//	Shasta	sht	Silver (1966)
North America	Isolate	//	//	Siuslaw	sis	Frachtenberg (1922)
North America	Isolate	//	//	Tonkawa	tqw	Hoijer (1933-1938)
North America	Isolate	//	//	Tunica	tun	Haas (1941)
North America	Isolate	//	//	Washo	was	Jacobsen (1964)
North America	Isolate	//	//	Yuchi	yuc	Linn (2000)
North America	Isolate	//	//	Zuni	zun	Nichols (1997)
North America	Jicaquean	//	//	Tol	jic	Holt (1999)
North America	Keresan	//	//	Keres, Western	kjq	Lachler (2006)
North America	Kiowa-Tanoan	//	//	Kiowa	kio	Watkins (1984)
North America	Maiduan	//	//	Maidu, Northwest	mjd	Ultan (1967)
North America	Mayan	Huastecan	Huastec	Huastec	hus	Kondić (2012)
North America	Mayan	Yucatecan -Core Mayan	Core Mayan > Cholan-Tzeltalan > Tzeltalan > Tzeltal	Tzeltal	tzh	Polian (2013)
North America	Mayan	Yucatecan -Core Mayan	Yucatecan > Mopan-Itza'	Itza'	itz	Hofling (2000)
North America	Miwok-Costanoan	Costanoan	//	Ohlone, Southern	css	Okrand (1977)

North America	Mixe-Zoquean	Zoquean	Gulf Zoquean	Popoluca, Highland	poi	Boudreault (2018)
North America	Muskogean	Muskogean	Eastern Muskogean > Creek-Seminole	Muskogee	mus	Martin (2011)
North America	Otomanguean	Eastern Otomanguean	Amuzgo-Mixtecan > Amuzgo	Amuzgo, Guerrero	amu	Do Bui (2018)
North America	Otomanguean	Eastern Otomanguean	Popolocan-Zapotecan > Zapotecan > Zapotec	Zapotec, Coatlán / San Baltazar Loxicha	zps / zpx	Beam de Azcona (2004)
North America	Otomanguean	Western Otomanguean	Oto-Pame-Chinantecan > Chinantecan	Chinantec, Sochiapam	cso	Foris (1994)
North America	Otomanguean	Western Otomanguean	Tlapanec-Manguan > Taplanec-Subtiaba	Me'phaa, Malinaltepec	tcf	Suárez (1983)
North America	Pomoan	Western	Southern	Pomo, Southern	peq	Walker (2013)
North America	Sahaptian	Sahaptin	//	Yakama	yak	Jansen (2010)
North America	Salish	Central Salish	//	Halkomelem	hur	Suttles (2004)
North America	Salish	Interior	Southern	Columbia-Wenatchi	col	Willett (2003)
North America	Sign language	//	//	American Sign Language	ase	Liddell (2003)
North America	Sign language	//	//	Inuit Sign Language	iks	Schuit (2014)
North America	Siouan-Catawban	Siouan	Missouri River Siouan	Hidatsan	hid	Park (2012)
North America	Tarascan	//	//	Purepecha, Western Highland	pua	de Wolf (2013)
North America	Tequistlatecan	//	//	Chontal, Lowland Oaxaca	clo	O'Connor (2004)
North America	Totonacan	Tepehua	//	Tepehua, Huehuetla	tee	Kung (2007)
North America	Tsimshian	Nass-Gitksan	//	Nisga'a	ncg	Tarpent (1989)
North America	Uto-Aztecan	Northern Uto-Aztecan	Numic > Southern	Ute-Southern Paiute	ute	Givón (2011)

North America	Uto-Aztecan	Southern Uto-Aztecan	Taracahitic > Tarahumaran > Tarahumara	Huarijío	var	Félix Armendáriz (2005)
North America	Wakashan	Southern Wakashan	//	Nuu-chah-nulth	nuk	Davidson (2002)
North America	Wintuan	//	//	Wintu	wnw	Pitkin (1984)
North America	Witotoan	Proto-Huitoto-Ocaina	Early Huitoto > Proto-Minica-Murai	Witoto, Murui	huu	Wojtylak (2017)
North America	Yokutsan	//	//	Yokuts (Tule-Kaweah Yokuts)	yok	Gamble (1978)
North America	Yukian	Core Yukian	//	Yuki	yuk	Balodis (2011)
South America	Arauan	Jamamadi	//	Jamamadí	jaa	Dixon (2004)
South America	Aymaran	Aymara	//	Aymara, Southern	ayc	Coler (2014)
South America	Barbacoan	Northern	//	Awa-Cuaquier	kwi	Curnow (1997)
South America	Bororoan	//	//	Borôro	bor	Crowell (1979)
South America	Botocudoan	//	//	Krenak	kqq	Pessoa (2012)
South America	Cariban	South Amazonian	//	E'ñapa Woromaipu	pbh	Payne & Payne (2013)
South America	Cariban	Tiriyó	Tiriyó	Trió	tri	Meira (1999)
South America	Chapacuran	Wari	//	Pakaásnovos	pav	Everett & Kern (1997)
South America	Chibchan	Chibchan A	//	Teribe	tfr	Quesada (2000)
South America	Chibchan	Chibchan B	Eastern Chibchan > Cuna	Kuna, Border	kvn	Forster (2011)
South America	Chibchan	Chibchan B	Votic	Maléku Jaíka	gut	Constenla Umaña (1998)
South America	Chipaya-Uru	//	//	Uru	ure	Hannß (2008)
South America	Chocoan	Emberá	Northern Emberá	Emberá, Northern	emp	Mortensen (1999)

South America	Chocoan	Emberá	Southern Emberá	Emberá, Chamí	cmi	Aguirre Licht (1999)
South America	Cholonan	//	//	Cholón	cht	Alexander-Bakkerus (2005)
South America	Chon	//	//	Tehuelche	teh	Fernández Garay (1998)
South America	Creole	Dutch	//	Berbice Creole Dutch	brc	Kouwenberg (1994)
South America	Creole	Iberian	//	Papiamentu	pap	Kramer (2004)
South America	Guajiboan	Guajibo	//	Guahibo	guh	Queixalós (1995)
South America	Guaykuran	Southern	//	Pilagá	plg	Vidal (2001)
South America	Isolate	//	//	Andoque	ano	Landaburu (1979)
South America	Isolate	//	//	Guató	gta	Pimentel Palácio (1984)
South America	Isolate	//	//	Iatê	fun	da Costa (1999)
South America	Isolate	//	//	Irántxe	irn	Monserrat (2000)
South America	Isolate	//	//	Kanoé	kxo	Bacelar (2004)
South America	Isolate	//	//	Kwaza	xwa	van der Voort (2004)
South America	Isolate	//	//	Movima	mzp	Haude (2006)
South America	Isolate	//	//	Ofayé	opy	das Dorés de Oliveira (2006)
South America	Isolate	//	//	Rikbaktsa	rkb	Silva (2011)
South America	Isolate	//	//	Ticuna	tca	Montes Rodríguez (2004)
South America	Isolate	//	//	Trumai	tpy	Guirardello (1999)
South America	Isolate	//	//	Urarina	ura	Olawsky (2006)
South America	Isolate	//	//	Warao	wba	Romero-Figeroa (1997)

South America	Isolate	//	//	Yuracare	yuz	van Gijn (2006)
South America	Jabutian	//	//	Jabutí	jbt	Pires (1992)
South America	Jean	Central	//	Xavánte	xav	Machado Estevam (2011)
South America	Jean	Northern	//	Apinayé	apn	Cunha de Oliveira (2005)
South America	Jean	Northern	Timbira	Gavião, Pará	gvp	de Oliveira Ferreira (2003)
South America	Jean	Southern	Kaingang	Kaingang	kgp	Ribeiro da Silva (2011)
South America	Jivaroan	Jívaro	//	Wampís	hub	Peña (2015)
South America	Karajá	//	//	Karajá	kpj	Ribeiro (2012)
South America	Katukinan	//	//	Katukína (/ Kanamarí)	kav (/ knm)	dos Anjos (2011)
South America	Kaweskaran	//	//	Qawasqar	alc	Aguilera (2001), Clairis (1985)
South America	Maipurean	Northern	Upper Amazon > Eastern Nawiki	Tariana	tae	Aikhenvald (2003)
South America	Maipurean	Southern	Central > Paresí	Parecis	pab	Brandão (2014)
South America	Mapudungu	//	//	Mapudungun	arn	Smeets (2008)
South America	Mascoyan	//	//	Sanapaná	spn	Silva Gomes (2013)
South America	Matacoan	//	//	Nivacle	cag	Fabre (2016)
South America	Maxakalian	//	//	Maxakalí	mbi	Campos (2009)
South America	Misumalpan	//	//	Mískito	miq	Salamanca (1988)
South America	Mosetenan	//	//	Tsimané	cas	Sakel (2004)
South America	Muran	//	//	Pirahã	myp	Everett (1983), Everett (1986)

South America	Nambikwara	Nambikwara Complex	Northern	Mamaindé	wmd	Eberhard (2009)
South America	Paezan	Paezan	//	Páez	pbb	Rojas Curieux (1998)
South America	Panoan	Mainline	Cashibo	Kakataibo-Kashibo	cbr	Zariquiey (2018)
South America	Panoan	Mayoruna-Matsés	//	Matses	mcf	Fleck (2003)
South America	Puinavean	Hupda	//	Hupdë	jup	Epps (2008)
South America	Quechuan	Central Quechua	Wankay	Quechua, Yauyos	qux	Shimelman (2017)
South America	Sálivan	Piaroa-Maco	//	Maco	wpc	Rosés Labrada (2015)
South America	Sign language	//	//	Argentine Sign Language	aed	Massone & Machado (1999)
South America	Tacanan	//	//	Cavineña	cav	Guillaume (2008)
South America	Tucanoan	Eastern Tucanoan	//	Guanano	gvc	Stenzel (2013)
South America	Tucanoan	Western Tucanoan	//	Tanimuca-Retuarã	tnc	Eraso Keller (2015)
South America	Tupian	Arikem	//	Karitiâna	ktn	Everett (2007)
South America	Tupian	Ramarama	//	Karo	arr	Gabas (1999)
South America	Tupian	Tuparí	//	Akuntsu	aqz	Aragon (2014)
South America	Tupian	Tupí-Guaraní	Tupí > Cocama	Kukama-Kukamiria	cod	Vallejos (2016)
South America	Unclassified	//	//	Shanenawa	swo	Cândido (2004)
South America	Yaguan	//	//	Yagua	yag	Payne (1985), Payne & Payne (1990)
South America	Yanomaman	//	//	Ninam	shb	Goodwin Gómez (1990)
South America	Zamucoan	//	//	Ayoreo	ayo	Bertinetto (2009)

South America	Zaparoan	Záparo	//	Záparo	zro	Moya (2007)
Southeast Asia & Oceania	Austro-Asiatic	Mon-Khmer	Aslian > South Aslian	Semelai	sza	Kruspe (2004)
Southeast Asia & Oceania	Austro-Asiatic	Mon-Khmer	Eastern Mon-Khmer > Bahnaric > South Bahnaric > Stieng-Chrau	Stieng, Bulo	sti	Bon (2014)
Southeast Asia & Oceania	Austro-Asiatic	Mon-Khmer	Eastern Mon-Khmer > Katuic > East Katuic > Katu-Pacoh	Pacoh	pac	Alves (2000)
Southeast Asia & Oceania	Austro-Asiatic	Mon-Khmer	Eastern Mon-Khmer > Khmer	Khmer	khm	Haiman (2011)
Southeast Asia & Oceania	Austro-Asiatic	Mon-Khmer	Northern Mon-Khmer > Khasian	Pnar	pbv	Ring (2015)
Southeast Asia & Oceania	Austro-Asiatic	Mon-Khmer	Viet-Muong > Vietnamese	Vietnamese	vie	Thompson (1984-1985)
Southeast Asia & Oceania	Austro-Asiatic	Munda	North Munda > Mundari	Ho	hoc	Pucilowski (2013)
Southeast Asia & Oceania	Austro-Asiatic	Munda	South Munda > Kharia-Juang	Kharia	KHR	Peterson (2011)
Southeast Asia & Oceania	Austro-Asiatic	Mon-Khmer	Monic	Mon	mnw	Bauer (1985)
Southeast Asia & Oceania	Austronesian	Atayalic	//	Atayal	tay	Rau (1992)
Southeast Asia & Oceania	Austronesian	Bunun	//	Bunun	bnn	De Busser (2009)
Southeast Asia & Oceania	Austronesian	East Formosan	Southwest	Siraya	fos	Adelaar (2011)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Bali-Sasak-Sumbawa	Bali	ban	Clynes (1995)

Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Bashiic > Ivatan	Ibatan	ibt	Maree (2007)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Bilic > Tboli	Tboli	tbl	Porter (1977)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Celebic > Eastern > Southeastern > Muna-Buton > Tukangbesi-Bonerate	Tukang Besi North	khc	Donohue (1999)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Celebic > Tomini-Tolitoli > Tomini > Southern	Pendau	ums	Quick (2007)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Aru	Batuley	bay	Daigle (2015)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Bima-Lembata	Lewotobi	lwt	Nagaya (2012)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Central Maluku > Buru	Buru	mhs	Grimes (1991)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Eastern Malayo-Polynesian > Oceanic > Admiralty Islands > Eastern > Southeast Islands	Baluan-Pam	blq	Schokkin (2014)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Eastern Malayo-Polynesian > Oceanic > Central-Eastern Oceanic > Remote Oceanic > Central Pacific > East Fijian-Polynesian > Polynesian > Nuclear > East > Rapanui	Rapa Nui	rap	Kieviet (2017)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Eastern Malayo-Polynesian > Oceanic > Central-Eastern Oceanic > Remote Oceanic > Micronesian > Micronesian Proper > Marshallese	Marshallese	mah	Bender et al. (2016)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Eastern Malayo-Polynesian > Oceanic > Central-Eastern Oceanic > Remote Oceanic > New Caledonian > Northern > Extreme Northern	Nyelâyu	yly	McCracken (2013)

Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Eastern Malayo-Polynesian > Oceanic > Central-Eastern Oceanic > Remote Oceanic > North and Central Vanuatu > Northeast Vanuatu-Banks Islands > East Vanuatu	Vurës	msn	Malau (2016)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Eastern Malayo-Polynesian > Oceanic > Central-Eastern Oceanic > South Vanuatu > Erromanga	Ura	uur	Crowley (1999)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Eastern Malayo-Polynesian > Oceanic > Central-Eastern Oceanic > Southeast Solomonian > Malaita-San Cristobal > Malaita > Northern	To'abaita	mlu	Lichtenberk (2008)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Eastern Malayo-Polynesian > Oceanic > St. Matthias	Mussau-Emira	emi	Brownie & Brownie (2007)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Eastern Malayo-Polynesian > Oceanic > Western Oceanic > Meso Melanesian > New Ireland > Madak	Barok	bjk	Du (2010)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Eastern Malayo-Polynesian > Oceanic > Western Oceanic > Meso Melanesian > New Ireland > South New Ireland-Northwest Solomonian > Patpatar-Tolai	Siar-Lak	sjr	Frowein (2011)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Eastern Malayo-Polynesian > Oceanic > Western Oceanic > North New Guinea > Huon Gulf > North	Bugawac	buk	Eckermann (2007)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Eastern Malayo-Polynesian > Oceanic > Western Oceanic > North New Guinea > Ngero-Vitiaz > Ngero > Bariai	Kove	kvc	Sato (2013)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Eastern Malayo-Polynesian > Oceanic > Western Oceanic > North New Guinea > Schouten > Kairiru-Manam > Manam	Manam	mva	Lichtenberk (1983)

Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Eastern Malayo-Polynesian > Oceanic > Western Oceanic > Papuan Tip > Nuclear > North Papuan Mainland-D'Entrecasteaux > Are-Taupota > Taupota	Tawala	tbo	Ezard (1997)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Eastern Malayo-Polynesian > Oceanic > Western Oceanic > Papuan Tip > Peripheral > Central Papuan > West Central Papuan > Nuclear	Mekeo	mek	Jones (1998)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Eastern Malayo-Polynesian > Oceanic > Yapese	Yapese	yap	Jensen (1977)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Eastern Malayo-Polynesian > Temotu > Oceanic > Reefs-Santa Cruz	Engdewu	ngr	Vaa (2013)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > South Halmahera-West New Guinea > West New Guinea > Cenderawasih Bay > Yafen > Central-Western	Woi	wbw	Sawaki (2017)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Southeast Maluku > Southern	Selaru	slu	Coward (1990)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Sumba-Hawu > Sumba	Kambera	xbr	Klamer (1998)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Timor-Babar > Southwest Maluku > Luang	Leti	lti	van Engelenhoven (2004)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Luzon > Pampangan	Pampangan	pam	Gonzalez (1981)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Chamorro	Chamorro	cha	Topping (1973)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Greater Barito > Sama-Bajaw > Sulu-Borneo > Borneo Coast Bajaw	Bajau, West Coast	bdr	Miller (2007)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Greater Central Philippine > Central Philippine > Bisayan > Cebuan	Cebuano	ceb	Tanangkingsing (2009)

Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Greater Central Philippine > Manobo > Central > South > Ata-Tigwa	Manobo, Matigsalug	mbt	Wang et al. (2006)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Javanese	Javanese	jav	Suharno (1982)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Land Dayak > Bakati'	Bakati'	bei	Sударsono (2002)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Madurese	Madura	mad	Davies (2010)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Malayo-Chamic > Chamic > Highlands	Bih	ibh	Nguyen (2013)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Malayo-Chamic > Malayic > Malay	Malay, Jambi	jax	Yanti (2010)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Minahasan > North > Northeast	Tondano	tdn	Brickell (2014)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Moklen	Moken	mwt	Chantanakomes (1980)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	North Borneo > North Sarawakan > Dayic > Kelabit	Kelabit	kzi	Hemmings (2016)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	North Borneo > Sabahan > Ida'an	Ida'an	dbj	Goudswaard (2005)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	North Mangyan	Iraya	iry	Tweddell (1958)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Northern Luzon > Ilocano	Ilocano	ilo	Rubino (1997)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Northern Luzon > Northern Cordilleran > Northeastern Luzon > Northern	Agta, Dupaninan	duo	Robinson (2008)

Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Northwest Sumatra-Barrier Islands > Nias	Nias	nia	Brown (2001)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Palauan	Palauan	pau	Josephs (1975)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Palawanic	Palawano, Central	plc	Revel-MacDonald (1979)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	South Sulawesi > Makassar	Makasar	mak	Jukes (2006)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Subanon > Eastern	Subanen, Northern	stb	Daguman (2004)
Southeast Asia & Oceania	Austronesian	Paiwan	//	Paiwan	pwn	Chang (2006)
Southeast Asia & Oceania	Austronesian	Payuma	//	Payuma	pyu	Teng (2007)
Southeast Asia & Oceania	Austronesian	Rukai	//	Rukai	dru	Zeitoun (2005)
Southeast Asia & Oceania	Austronesian	Tsouic	//	Saaroa	sxr	Pan (2012)
Southeast Asia & Oceania	Austronesian	Western Plains	Thao	Thao	ssf	Blust (2003)
Southeast Asia & Oceania	Creole	Spanish	//	Chavacano	cbk	Forman (1972)
Southeast Asia & Oceania	Creole	Tetun	//	Tetun Dili	tdt	Williams-van Klinken et al. (2001)
Southeast Asia & Oceania	Hmong-Mien	Hmongic	Xiangxi	Miao, Western Xiangxi	mmr	Sposato (2015)

Southeast Asia & Oceania	Isolate	//	//	Abun	kgr	Berry & Berry (1999)
Southeast Asia & Oceania	Isolate	//	//	Hatam	had	Reesink (1999)
Southeast Asia & Oceania	Maybrat	//	//	Mai Brat	ayz	Dol (2007), Dol (1999)
Southeast Asia & Oceania	Senagi	//	//	Dera	kbv	de Sousa (2006)
Southeast Asia & Oceania	Sino-Tibetan	Chinese	//	Mandarin Chinese	cmn	Li & Thompson (1981), Huang & Shi (2016)
Southeast Asia & Oceania	Sino-Tibetan	Tibeto-Burman	Angami-Pochuri	Naga, Mao	nbi	Giridhar (1994)
Southeast Asia & Oceania	Sino-Tibetan	Tibeto-Burman	Central Naga	Naga, Ao	njo	Coupe (2007)
Southeast Asia & Oceania	Sino-Tibetan	Tibeto-Burman	Central Tibeto-Burman > Kho-Bwa	Chug	cvg	Bodt (2020)
Southeast Asia & Oceania	Sino-Tibetan	Tibeto-Burman	Karbi	Karbi	mjlw	Konnerth (2014)
Southeast Asia & Oceania	Sino-Tibetan	Tibeto-Burman	Karenic > Central	Kayah, Eastern	eky	Solnit (1997)
Southeast Asia & Oceania	Sino-Tibetan	Tibeto-Burman	Kuki-Chin > Peripheral > Southern > Cho-Asho > Cho	Chin, Daai	dao	So-Hartmann (2009)
Southeast Asia & Oceania	Sino-Tibetan	Tibeto-Burman	Ngwi-Burmese > Ngwi > Northern	Katso	kaf	Donlay (2019)
Southeast Asia & Oceania	Sino-Tibetan	Tibeto-Burman	Northeastern Tibeto-Burman	Narua	nru	Lidz (2010)

Southeast Asia & Oceania	Sino-Tibetan	Tibeto-Burman	Sal > Kuki-Chin-Naga	Meithei	mni	Chelliah (1997)
Southeast Asia & Oceania	Sino-Tibetan	Tibeto-Burman	Western Naga	Koireng	nkd	Singh (2010), Waikhom (2013)
Southeast Asia & Oceania	Sino-Tibetan	Tibeto-Burman	Western Tibeto-Burman > Bodish > West Himalayish > Kinauri	Gahri	bfu	Widmer (2017)
Southeast Asia & Oceania	Sino-Tibetan	Tibeto-Burman	Western Tibeto-Burman > Himalayan > Kiranti > Eastern	Yakkha	ybh	Schackow (2015)
Southeast Asia & Oceania	Tai-Kadai	Kam-Tai	Kam Sui	Maonan	mmr	Lu (2008)
Southeast Asia & Oceania	Tai-Kadai	Kam-Tai	Tai > Southwestern	Lao	lao	Enfield (2007)
Southeast Asia & Oceania	Tai-Kadai	Kra	Western Kra	A'ou	aou	Li et al. (2014)
Southeast Asia & Oceania	Tor-Kwerba	Orya-Tor	Tor	Berik	bkl	Westrum (1988)

Table 2 – Variety sample composed of 223 languages.

Macro-Area	Family	Genus	Sub-classification	Language	ISO-639-3	References
Africa	Afro-Asiatic	Berber	Tamasheq > Southern	Tamasheq	taq	Heath (2005)
Africa	Afro-Asiatic	Chadic	Biu-Mandara > A > A.7	Buwal	bhs	Viljoen (2013)
Africa	Afro-Asiatic	Chadic	East > A > A.2 > 1	Lele	lln	Frajzyngier (2001)
Africa	Afro-Asiatic	Chadic	West > A > A.3 > Angas Proper > 2	Goemai	ank	Hellwig (2011)
Africa	Afro-Asiatic	Cushitic	East > Western Omo-Tana	Daasanach	dsh	Tosco (2001)
Africa	Afro-Asiatic	Omotic	South	Hamer-Banna	amf	Petrollino (2016)
Africa	Afro-Asiatic	Semitic	South > South Arabian	Mehri	gdq	Rubin (2018)
Africa	Creole	Arabic	//	Arabic Sudanese Creole	pga	Manfredi (2017)
Africa	Creole	Portuguese	//	Kabuverdianu	kea	Quint (1998)
Africa	Isolate	//	//	Bangime	dba	Heath & Hantgan (2017)
Africa	Khoe-Kwadi (Khoisan)	Khoe	Kalahari Khoe > Northwest	Khwedam	xuu	Kilian-Hatz (2008)
Africa	Kx'a	!Kung	//	Kung-Ekoka	knw	Heine & König (2016)
Africa	Niger-Congo	Atlantic-Congo	Atlantic > Southern > Mel > Bullom Kissi > Bullom > Northern	Bullom So	buy	Childs (2011)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Northern > Mambiloid > Suga-Vute > Vute	Wawa	www	Martin (2012)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > Beboid	Noone	nhu	Hyman (1981)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > Narrow Bantu > Central > P > Makhwa (P.34)	Chuwabu	chw	Guérois (2015)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > Narrow Bantu > Northwest > A > Ewondo-Fang (A.71)	Eton	eto	van de Velde (2008)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > West Grassfieldss > Narrow Grassfields > Mbam-Nkam > Ngemba	Ngemba	nge	Leroy (2007)

Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Bantoid > Southern > Yemne-Kimbi	Mungbam	mij	Lovegren (2013)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Cross River > Delta Cross > Lower Cross > Obolo	Obolo	ann	Rowland Oke (2003)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Defoid > Edekiri	Yoruba	yor	Bamgboṣe (1966)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Edoid > North-Central > Edo-Esan-Ora	Emai-Iuleha-Ora	ema	Schaefer & Egbokhare (2017)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Jukunoid > Central > Jukun-Mbembe-Wurbo > Mbembe	Mbembe Tigon	nza	Richter (2012)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Kainji > Western > Kamuku	Cicipu	awc	McGill (2009)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Nupoid > Nupe-Gbagyi > Gbagyi-Gbari	Gbari	gby	Rosendall (1998)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Benue-Congo > Plateau > Southern	Lijili	mgi	Stofberg (1978)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Dogon	Jamsay Dogon	djm	Heath (2008)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Kru > Eastern > Bete > Western	Godié	god	Godé (2008)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > Kwa > Left Bank > Kposo-Ahlo-Bowili	Ikposo	kpo	Soubrier (2013)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > North > Adamawa-Ubangi > Ubangi > Ngbandi	Mundang	mua	Elders (2000)
Africa	Niger-Congo	Atlantic-Congo	Volta-Congo > North > Gur > Kulango	Bouna Kulango	nku	Elders (2008)
Africa	Niger-Congo	Kordofania n	Talodi > Talodi Proper > Tocho	Lumun	lmd	Smits (2017)
Africa	Niger-Congo	Mande	Eastern > Southeastern > Guro-Tura > Tura-Dan-Mano > Mano	Maan	mev	Khachaturyan (2014)
Africa	Nilo-Saharan	Kuliak	//	Ik	ikx	Schrock (2014)
Africa	Nilo-Saharan	Saharan	Eastern	Zaghawa	zag	Jakobi, et al. (2004)
Africa	Nilo-Saharan	Satellite-Core	Core > B'aga	Gumuz	guk	Ahland (2012)
Africa	Nilo-Saharan	Satellite-Core	Core > Eastern Sudanic > Southern > Nilotic > Western > Luo > Southern > Luo-Acholi > Alur-Acholi > Lango-Acholi	Lango	laj	Noonan (1992)

Africa	Nilo-Saharan	Satellite-Core	Satellite > Central Sudanic > East > Moru-Madi > Southern	Ma'di	mhi	Blackings & Fabb (2003)
Africa	Nilo-Saharan	Songhay	Southern	Koyra Chiini Songhay	khq	Heath (1999)
Africa	Sign language	//	//	Adamorobe Sign Language	ads	Nyst (2007)
Africa	Tuu	!Ui	//	N u	ngh	Collins & Namaseb (2011)
Australia & New Guinea	Australian	Bunaban	//	Gooniyandi	gni	McGregor (1990)
Australia & New Guinea	Australian	Gunwingguan	Yangmanic	Wardaman	wrr	Merlan (1994)
Australia & New Guinea	Australian	Nyulnyulan	//	Bardi	bcj	Bowern (2012)
Australia & New Guinea	Australian	Pama-Nyungan	Maric	Warungu	wrg	Tsunoda (2011)
Australia & New Guinea	Australian	Tangic	//	Kayardild	gyd	Evans (1995)
Australia & New Guinea	Australian	Worrorran	Western Worrorran	Worrorra	wro	Clendon (2014)
Australia & New Guinea	Australian	Yanyi	//	Garrwa	wrk	Mushin (2012)
Australia & New Guinea	Border	Waris	//	Imonda	imn	Seiler (1985)
Australia & New Guinea	Central Solomons	//	//	Lavukaleve	lvk	Terrill (2003)
Australia & New Guinea	East Bird's Head-Sentani	East Bird's Head	Meax	Moskona	mtj	Gravelle (2010)
Australia & New Guinea	East New Britain	Baining	//	Mali	gcc	Stebbins (2011)
Australia & New Guinea	Fas	//	//	Fas	fqs	Honeyman (2017)
Australia & New Guinea	Harákmbut	//	//	Amarakaeri	amr	Helberg Chávez (1984)
Australia & New Guinea	Isolate	//	//	Kuot	kto	Lindström (2002)
Australia & New Guinea	Kwomtari	Nuclear Kwomtari	//	Kwomtari	kwo	Honsberger et al. (2008)
Australia & New Guinea	Lower Mamberamo	//	//	Warembori	wsa	Donohue (1999)
Australia & New Guinea	Mongol-Langam	//	//	Yaul	yla	Barlow (2018)

Australia & New Guinea	Nimboran	//	//	Nimboran	nir	May (1997), Anceaux (1965)
Australia & New Guinea	North Bougainville	Rotokas	//	Rotokas	roo	Robinson (2011)
Australia & New Guinea	Pidgin	Motu	//	Motu, Hiri	hmo	Dutton & Voorhoeve (1975)
Australia & New Guinea	Ramu-Lower Sepik	Lower Sepik	Karawari	Yimas	yee	Foley (1991)
Australia & New Guinea	Sepik	Tama	//	Mehek	nux	Hatfield (2016)
Australia & New Guinea	Skou	Skou-Serra-Piore	Serra Hills > Piore River	Warupu	wra	Corris (2005)
Australia & New Guinea	South Bougainville	Buin	//	Siwai	siw	Onishi (1994)
Australia & New Guinea	South-Central Papuan	Morehead-Upper Maro	Tonda	Wára	tei	Döhler (2018)
Australia & New Guinea	Torricelli	Wapei-Palei	Wapei	Yapunda	yev	Wilson (2017)
Australia & New Guinea	Trans-New Guinea	Amsat-Kamoro	Asmat	Asmat, Central	asn	Voorhoeve (1965)
Australia & New Guinea	Trans-New Guinea	Angan	Nuclear Angan	Menya	mcr	Whitehead (2004)
Australia & New Guinea	Trans-New Guinea	Duna-Bogaya	//	Duna	duc	San Roque (2008)
Australia & New Guinea	Trans-New Guinea	Engan	Angal-Kewa	Kwewa, East	kjs	Yarapea (2006)
Australia & New Guinea	Trans-New Guinea	Finisterre-Huon	Finisterre > Uruwa	Yau	yuw	Sarvasy (2017), Sarvasy (2014)
Australia & New Guinea	Trans-New Guinea	Kainantu-Goroka	Gorokan > Kamano-Yagaria	Yagaria	ygr	Haiman (1980)
Australia & New Guinea	Trans-New Guinea	Madang	Croisilles > Pihom > Kumilan	Mauwake	mhl	Berghäll (2015)
Australia & New Guinea	Trans-New Guinea	Marind	Nuclear Marind	Marind	mrz	Olsson (2017)
Australia & New Guinea	Trans-New Guinea	Ok-Awyu	Ok > Mountain	Mian	mpt	Fedden (2011)
Australia & New Guinea	Trans-New Guinea	Oksapmin	//	Oksapmin	opm	Loughnane (2009)

Australia & New Guinea	Trans-New Guinea	Southeast Papuan	Dagan	Daga	dgz	Murane (1974)
Australia & New Guinea	Trans-New Guinea	West	Timor-Alor-Pantar > Timor	Makasae	mkz	Huber (2011)
Australia & New Guinea	West Papuan	North Halmahera	Ternate-Tidore	Tidore	tvo	van Staden (2000)
Eurasia	Andamanese	Great Andamane se	Northern	Aka-Jeru	akj	Abbi (2013)
Eurasia	Chukotko-Kamchatkan	Northern	Chukot	Chukchi	ckt	Dunn (1999)
Eurasia	Dravidian	Northern	//	Kurux	kru	Kobayashi & Tirkey (2017)
Eurasia	Indo-European	Armenian	//	Armenian	hye	Dum-Tragut (2009)
Eurasia	Indo-European	Balto-Slavic	Baltic > Eastern	Lithuanian	lit	Vytautas et al. (2006)
Eurasia	Indo-European	Celtic	Insular > Brythonic	Breton	bre	Crahe (2013)
Eurasia	Indo-European	Germanic	West > Frisian	Frisian, Northern	frr	Lasswell (1998)
Eurasia	Indo-European	Greek	Attic	Greek	ell	Holton et al. (2012)
Eurasia	Indo-European	Indo-Iranian	Indo-Aryan > Outer Languages > Northwestern > Dardic > Shina	Palula	phl	Liljegren (2016)
Eurasia	Indo-European	Italic	Romance > Italo-Western > Western > Gallo-Iberian > Ibero-romance > East Iberian	Catalan	cat	Hualde (1992)
Eurasia	Isolate	//	//	Ainu	ain	Bugaeva (2004)
Eurasia	Isolate	//	//	Basque	eus	Hualde & Ortiz de Urbana (2003)
Eurasia	Isolate	//	//	Burushaski	bsk	Yoshioka (2012)
Eurasia	Japonic	//	//	Japanese	jpn	Kaiser et al. (2013), Martin (1988)
Eurasia	Kartvelian	Zan	//	Laz	lzz	Lacroix (2009)
Eurasia	Koreanic	//	//	Korean	kor	Sohn (1994), Martin (1992)
Eurasia	Mongolic	Eastern	Mongour	Bonan	peh	Fried (2010)
Eurasia	North Caucasian	East Caucasian	Tsezic > West Tsezic	Hinukh	gin	Forker (2013)
Eurasia	Tungusic	Southern	Udihe	Udihe	ude	Nikolaeva & Tolskaya (2001)
Eurasia	Turkic	Eastern	//	Uyghur	uig	Abdurehim (2014)

Eurasia	Uralic	Samoyed	Northern Samoyed	Nenets	yrk	Nikolaeva (2014)
Eurasia	Yeniseian	//	//	Ket	ket	Georg (2007)
Eurasia	Yukaghir	//	//	Southern Yukaghir	yux	Maslova (2003)
North America	Algic	Algonquian	Arapaho	Arapaho	arp	Cowell & Moss (2008)
North America	Caddoan	Caddoan	Northern Caddoan > Kitsai-Proto-Pawnee > Proto-Pawnee	Pawnee	paw	Parks (1976)
North America	Chumash	Chumashan	Central Chumash	Ineseño	inz	Applegate (1972)
North America	Cochimi-Yuman	Yuman	Pai	Havasupai-Walapai-Yavapai	yuf	Watahomigie et al. (1982)
North America	Eskimo-Aleut	Eskimo	Yupik > Alaskan Yupik	Yupik, Central	esu	Miyaoka (2012)
North America	Eyak-Athabaskan	Athabaskan	Northern Athabaskan	Chilcotin	clc	Cook (2013)
North America	Haida	//	//	Haida, Northern/Southern	hdn / hax	Enrico (2003)
North America	Huavean	//	//	Huave, San Dioniso del Mar	hve	Salminen (2017)
North America	Iroquoian	Northern Iroquoian	Five Nations-Huronian-Susquehannock > Five Nations-Susquehannock	Onondaga	ono	Woodbury (2018)
North America	Isolate	//	//	Karok	kyh	Bright (1957)
North America	Isolate	//	//	Klamath-Modoc	kla	Barker (1964)
North America	Isolate	//	//	Kutenai	kut	Morgan (1992)
North America	Isolate	//	//	Molale	mbe	Pharris (2006)
North America	Isolate	//	//	Tonkawa	tqw	Hoijer (1933-1938)
North America	Isolate	//	//	Washo	was	Jacobsen (1964)
North America	Isolate	//	//	Yuchi	yuc	Linn (2000)
North America	Isolate	//	//	Zuni	zun	Nichols (1997)
North America	Kiowa-Tanoan	//	//	Kiowa	kio	Watkins (1984)

North America	Maiduan	//	//	Maidu, Northwest	mjd	Ultan (1967)
North America	Mayan	Yucatecan-Core Mayan	Yucatecan > Mopan-Itza'	Itza'	itz	Hofling (2000)
North America	Miwok-Costanoan	Costanoan	//	Ohlone, Southern	css	Okrand (1977)
North America	Mixe-Zoquean	Zoquean	Gulf Zoquean	Popoluca, Highland	poi	Boudreault (2018)
North America	Muskogean	Muskogean	Eastern Muskogean > Creek-Seminole	Muskogee	mus	Martin (2011)
North America	Otomanguean	Eastern Otomanguean	Popolocan-Zapotecan > Zapotecan > Zapotec	Zapotec, Coatlán / San Baltazar Loxicha	zps / zpx	Beam de Azcona (2004)
North America	Pomoan	Western	Southern	Pomo, Southern	peq	Walker (2013)
North America	Sahaptian	Sahaptin	//	Yakama	yak	Jansen (2010)
North America	Salish	Central Salish	//	Halkomelem	hur	Suttles (2004)
North America	Siouan-Catawban	Siouan	Missouri River Siouan	Hidatsan	hid	Park (2012)
North America	Tarascan	//	//	Purepecha, Western Highland	pua	de Wolf (2013)
North America	Tequistlatecan	//	//	Chontal, Lowland Oaxaca	clo	O'Connor (2004)
North America	Totonacan	Tepehua	//	Tepehua, Huehuetla	tee	Kung (2007)
North America	Tsimshian	Nass-Gitksan	//	Nisga'a	ncg	Tarpent (1989)
North America	Uto-Aztecan	Northern Uto-Aztecan	Numic > Southern	Ute-Southern Paiute	ute	Givón (2011)
North America	Wakashan	Southern Wakashan	//	Nuu-chah-nulth	nuk	Davidson (2002)
North America	Wintuan	//	//	Wintu	wnw	Pitkin (1984)
North America	Witotoan	Proto-Huitoto-Ocaina	Early Huitoto > Proto-Minica-Murai	Witoto, Murui	huu	Wojtylak (2017)

North America	Yukian	Core Yukian	//	Yuki	yuk	Balodis (2011)
South America	Arauan	Jamamadi	//	Jamamadí	jaa	Dixon (2004)
South America	Aymaran	Aymara	//	Aymara, Southern	ayc	Coler (2014)
South America	Barbacoan	Northern	//	Awa-Cuaquier	kwi	Curnow (1997)
South America	Cariban	Tiriyó	Tiriyó	Trió	tri	Meira (1999)
South America	Chapacuran	Wari	//	Pakaásnovos	pav	Everett & Kern (1997)
South America	Chibchan	Chibchan B	Eastern Chibchan > Cuna	Kuna, Border	kvn	Forster (2011)
South America	Chipaya-Uru	//	//	Uru	ure	Hannß (2008)
South America	Chocoan	Emberá	Northern Emberá	Emberá, Northern	emp	Mortensen (1999)
South America	Cholonan	//	//	Cholón	cht	Alexander-Bakkerus (2005)
South America	Chon	//	//	Tehuelche	teh	Fernández Garay (1998)
South America	Guajiboan	Guajibo	//	Guahibo	guh	Queixalós (1995)
South America	Guaykuruan	Southern	//	Pilagá	plg	Vidal (2001)
South America	Isolate	//	//	Kwaza	xwa	van der Voort (2004)
South America	Isolate	//	//	Movima	mzp	Haude (2006)
South America	Isolate	//	//	Trumai	tpy	Guirardello (1999)
South America	Isolate	//	//	Urarina	ura	Olawsky (2006)
South America	Jean	Northern	//	Apinayé	apn	Cunha de Oliveira (2005)
South America	Jivaroan	Jívaro	//	Wampís	hub	Peña (2015)
South America	Karajá	//	//	Karajá	kpj	Ribeiro (2012)

South America	Katukinan	//	//	Katukína (/ Kanamarí)	kav (/ knm)	dos Anjos (2011)
South America	Kaweskaran	//	//	Qawasqar	alc	Aguilera F. (2001), Clairis (1985)
South America	Maipurean	Northern	Upper Amazon > Eastern Nawiki	Tariana	tae	Aikhenvald (2003)
South America	Mapudungu	//	//	Mapudungun	arn	Smeets (2008)
South America	Mascoyan	//	//	Sanapaná	spn	Silva Gomes (2013)
South America	Matacoan	//	//	Nivaclé	cag	Fabre (2016)
South America	Maxakalian	//	//	Maxakalí	mbl	Campos (2009)
South America	Misumalpan	//	//	Mískito	miq	Salamanca (1988)
South America	Mosetenan	//	//	Tsimané	cas	Sakel (2004)
South America	Nambikwara	Nambikwara Complex	Northern	Mamaindé	wmd	Eberhard (2009)
South America	Paezan	Paezan	//	Páez	pbb	Rojas Curieux (1998)
South America	Panoan	Mainline	Cashibo	Kakataibo-Kashibo	cbr	Zariquey (2018)
South America	Puinavean	Hupda	//	Hupdë	jup	Epps (2008)
South America	Quechuan	Central Quechua	Wankay	Quechua, Yauyos	qux	Shimelman (2017)
South America	Sálivan	Piaroa-Maco	//	Maco	wpc	Rosés Labrada (2015)
South America	Tacanan	//	//	Cavineña	cav	Guillaume (2008)
South America	Tucanoan	Western Tucanoan	//	Tanimuca-Retuarã	tnc	Eraso Keller (2015)
South America	Tupian	Tupí-Guaraní	Tupí > Cocama	Kukama-Kukamiria	cod	Vallejos (2016)
South America	Yanomaman	//	//	Ninam	shb	Goodwin Gómez (1990)

Southeast Asia & Oceania	Austro-Asiatic	Mon-Khmer	Aslian > South Aslian	Semelai	sza	Kruspe (2004)
Southeast Asia & Oceania	Austro-Asiatic	Mon-Khmer	Eastern Mon-Khmer > Bahnaric > South Bahnaric > Stieng-Chrau	Stieng, Bulo	sti	Bon (2014)
Southeast Asia & Oceania	Austro-Asiatic	Mon-Khmer	Northern Mon-Khmer > Khasian	Pnar	pbv	Ring (2015)
Southeast Asia & Oceania	Austro-Asiatic	Munda	South Munda > Kharia-Juang	Kharia	khv	Peterson (2011)
Southeast Asia & Oceania	Austronesian	Atayalic	//	Atayal	tay	Rau (1992)
Southeast Asia & Oceania	Austronesian	Bunun	//	Bunun	bnn	De Busser (2009)
Southeast Asia & Oceania	Austronesian	East Formosan	Southwest	Siraya	fos	Adelaar (2011)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Bali-Sasak-Sumbawa	Bali	ban	Clynes (1995)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Bashiic > Ivatan	Ibatan	ibt	Maree (2007)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Bilic > Tboli	Tboli	tbl	Porter (1977)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Celebic > Eastern > Southeastern > Muna-Buton > Tukangbesi-Bonerate	Tukang Besi North	kbc	Donohue (1999)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Eastern Malayo-Polynesian > Eastern Malayo-Polynesian > Oceanic > Central-Eastern Oceanic > Southeast Solomonian > Malaita-San Cristobal > Malaita > Northern	To'abaita	mlu	Lichtenberk (2008)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Central Luzon > Pampangan	Pampangan	pam	Gonzalez (1981)

Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Chamorro	Chamorro	cha	Topping (1973)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Greater Barito > Sama-Bajaw > Sulu-Borneo > Borneo Coast Bajaw	Bajau, West Coast	bdr	Miller (2007)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Greater Central Philippine > Central Philippine > Bisayan > Cebuan	Cebuano	ceb	Tanangkingsing (2009)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Javanese	Javanese	jav	Suharno (1982)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Land Dayak > Bakati'	Bakati'	bei	Sudarsono (2002)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Madurese	Madura	mad	Davies (2010)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Malayo-Chamic > Malayic > Malay	Malay, Jambi	jax	Yanti (2010)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Minahasan > North > Northeast	Tondano	tdn	Brickell (2014)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Moklen	Moken	mwt	Chantanakomes (1980)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	North Borneo > Sabahan > Ida'an	Ida'an	dbj	Goudswaard (2005)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	North Mangyan	Iraya	iry	Tweddell (1958)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Northern Luzon > Ilocano	Ilocano	ilo	Rubino (1997)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Northwest Sumatra-Barrier Islands > Nias	Nias	nia	Brown (2001)

Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Palauan	Palauan	pau	Josephs (1975)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Palawanic	Palawano, Central	plc	Revel-MacDonald (1979)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	South Sulawesi > Makassar	Makasar	mak	Jukes (2006)
Southeast Asia & Oceania	Austronesian	Malayo-Polynesian	Subanon > Eastern	Subanen, Northern	stb	Daguman (2004)
Southeast Asia & Oceania	Austronesian	Paiwan	//	Paiwan	pwn	Chang (2006)
Southeast Asia & Oceania	Austronesian	Payuma	//	Payuma	pyu	Teng (2007)
Southeast Asia & Oceania	Austronesian	Rukai	//	Rukai	dru	Zeitoun (2005)
Southeast Asia & Oceania	Austronesian	Tsouic	//	Saaroa	sxr	Pan (2012)
Southeast Asia & Oceania	Austronesian	Western Plains	Thao	Thao	ssf	Blust (2003)
Southeast Asia & Oceania	Hmong-Mien	Hmongic	Xiangxi	Miao, Western Xiangxi	mmr	Sposato (2015)
Southeast Asia & Oceania	Maybrat	//	//	Mai Brat	ayz	Dol (2007), Dol (1999)
Southeast Asia & Oceania	Senagi	//	//	Dera	kbv	de Sousa (2006)
Southeast Asia & Oceania	Sino-Tibetan	Chinese	//	Mandarin Chinese	cmn	Li & Thompson (1981), Huang & Shi (2016)

Southeast Asia & Oceania	Sino-Tibetan	Tibeto-Burman	Central Naga	Naga, Ao	njo	Coupe (2007)
Southeast Asia & Oceania	Sino-Tibetan	Tibeto-Burman	Karbi	Karbi	mjlw	Konnerth (2014)
Southeast Asia & Oceania	Sino-Tibetan	Tibeto-Burman	Ngwi-Burmese > Ngwi > Northern	Katso	kaf	Donlay (2019)
Southeast Asia & Oceania	Sino-Tibetan	Tibeto-Burman	Western Tibeto-Burman > Bodish > West Himalayish > Kinauri	Gahri	bfi	Widmer (2017)
Southeast Asia & Oceania	Sino-Tibetan	Tibeto-Burman	Western Tibeto-Burman > Himalayan > Kiranti > Eastern	Yakkha	ybh	Schackow (2015)
Southeast Asia & Oceania	Tai-Kadai	Kam-Tai	Tai > Southwestern	Lao	lao	Enfield (2007)